

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS  
 AN 1994:460729 CAPLUS  
 DN 121:60729  
 TI Silica sol for hydrophobic silica film  
 IN Murotani, Masaaki; Koshobu, Jun; Yaguchi, Kazuhiko; Suzuki, Itaru  
 PA Fuji Shirishia Kagaku Kk, Japan  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C01B033-145  
 ICS C01B033-12  
 CC 49-8 (Industrial Inorganic Chemicals)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06092621	A2	19940405	JP 1992-242257	19920910 <--
	JP 3360846	B2	20030107		
PRAI	JP 1992-242257		19920910		

AB Alkyl orthosilicates, alcs., water in the amt. of water/alkyl orthosilicate wt. ratio 0.1-0.8, and .gtoreq.1 of compds. having affinity to alc. and selected from aliph. satd. compd., cyclic ketones and arom. compds. are mixed in the presence of acid to produce a sol for the manuf. of a hydrophobic silica. The above sol can be dried to produce a hydrophobic SiO<sub>2</sub> powders or coated on a substrate and dried to produce a hydrophobic SiO<sub>2</sub> film.  
 ST hydrophobic silica film manuf  
 IT 56-23-5, Carbon tetrachloride, uses 64-17-5, Ethanol, uses 75-05-8, Acetonitrile, uses 75-52-5, Nitromethane, uses 95-50-1, o-Dichlorobenzene 108-94-1, Cyclohexanone, uses  
 RL: USES (Uses)  
 (in hydrophobic silica film manuf.)  
 IT 78-10-4, Ethyl orthosilicate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in hydrophobic silica film manuf.)  
 IT 7631-86-9P, Silica, preparation  
 RL: PREP (Preparation)  
 (sol, manuf. of hydrophobic, orthosilicates in)  
 RN 56-23-5  
 RN 64-17-5  
 RN 75-05-8  
 RN 75-52-5  
 RN 95-50-1  
 RN 108-94-1  
 RN 78-10-4  
 RN 7631-86-9P

L4 ANSWER 2 OF 3 WPIDS (C) 2003 THOMSON DERWENT  
 AN 1994-147671 [18] WPIDS  
 DNC C1994-067733  
 TI Silica sol for formation of hydrophobic silica - comprises alkyl ortho silicate, alcohol water and open chain cpd..  
 DC E36 G02  
 PA (FUJI-N) FUJI SILYSIA CHEM LTD  
 CYC 1

PI	JP 06092621	A	19940405 (199418)*	7p	C01B033-145	<--
	JP 3360846	B2	20030107 (200306)	7p	C01B033-145	
ADT	JP 06092621	A	JP 1992-242257 19920910;	JP 3360846	B2	JP 1992-242257 19920910

FDT JP 3360846 B2 Previous Publ. JP 06092621  
 PRAI JP 1992-242257 19920910

IC ICM C01B033-145  
ICS C01B033-12; C01B033-18  
AB JP 06092621 A UPAB: 19940622  
Silica sol for formation of hydrophobic silica, comprises an alkyl orthosilicate, an alcohol, and water (the volume ratio of the water to the alkyl orthosilicate is 0.1-0.8), a cpd(s) selected from an open chain cpd. having affinity to the alcohol, a cyclic ketone and an aromatic cpd. which are mixed and stirred in the presence of an acid.  
Also claimed are (i) a hydrophobic silica coat produced by coating the above-mentioned silica sol on a surface of a base material and drying; and (ii) a hydrophobic silica powder produced by drying the above-mentioned silica sol.  
USE/ADVANTAGE - Here, a hydrophobic silica powder and a hydrophobic silica coat can be produced in a simplified process. The level of the hydrophobic capacity of the produced hydrophobic silica powder can be the same or more than the conventionally available product.  
Dwg.0/1  
FS CPI  
FA AB; DCN  
MC CPI: E05-E03; E10-E04L; E10-J02D; E31-P01; E31-P03; G01-A06; G02-A01  
  
L4 ANSWER 3 OF 3 JAPIO COPYRIGHT 2003 JPO  
AN 1994-092621 JAPIO  
TI SILICA SOL FOR FORMING HYDROPHOBIC SILICA, HYDROPHOBIC SILICA FILM AND HYDROPHOBIC SILICA POWDER  
IN MUROTANI MASAAKI; KOSHOBU JUN; YAGUCHI KAZUHIKO; SUZUKI ITARU  
PA FUJI SHIRISHIA KAGAKU KK  
PI JP 06092621 A 19940405 Heisei  
AI JP 1992-242257 (JP04242257 Heisei) 19920910  
PRAI JP 1992-242257 19920910  
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1994  
IC ICM C01B033-145  
ICS C01B033-12  
AB PURPOSE: To obtain a silica sol for forming hydrophobic silica in a simplified process by mixing and stirring an alkyl orthosilicate with an alcohol and a specific compound having the affinity to the alcohol in the presence of an acid.  
CONSTITUTION: This silica sol is obtained by mixing and stirring an alkyl orthosilicate with an alcohol, water at 0.1-0.8vol. ratio to the alkyl orthosilicate and one or two or more selected from chain saturated compounds, cyclic ketones and aromatic compounds having the affinity to the alcohol in the presence of an acid. The hydrophobic silica film is formed by coating the surface of a substrate with the resultant silica sol and then drying the coated silica sol. Furthermore, the hydrophobic silica power is prepared by drying this silica sol.  
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